

REMARKS

Summary of the Office Action

Claims 1-4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jung et al. (US 2004/0090566) in view of Arakawa et al. (US 6,621,550) and Gu et al. (US 6,359,672).

Claims 5-11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Nakamura et al. (US 6,582,862) in view of Abileah et al. (US 5,499,126).

Claims 12-21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Abileah et al. in view of Nakamura et al.

Claims 1-4 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement.

Summary of the Response to the Office Action

Applicants have amended claims 1, 3, 5, 6, and 8 to further define the invention. Accordingly, claims 1-21 are pending for further consideration.

All Claims Comply with 35 U.S.C. § 112

Claims 1-4 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. Specifically, the Final Office Action alleges that “[a]s amended, claims 1-4 contain new matter, which was not described in the specification, as ‘wherein the pixel electrode overlaps the data line.’” Applicants respectfully disagree.

Applicants respectfully assert that the specification, and FIG. 8 specifically, fully provide support for the claimed feature of “the pixel electrode overlaps the data line,” as recited by independent claims 1 and 3. As clearly shown in FIG. 8, the pixel electrode 309 overlaps the data line 306. Accordingly, Applicants respectfully assert that claims 1-4 fully comply with the

written description requirement set forth by 35 U.S.C. § 112. Thus, Applicants respectfully request that the rejection of claims 1-4 under 35 U.S.C. § 112, first paragraph, be immediately withdrawn.

If the Examiner feels that Applicants' explanation is not adequate to overcome the rejection of claims 1-4 under 35 U.S.C. § 112, first paragraph, Applicants respectfully request that the Examiner immediately contact Applicants' undersigned representative to clarify the grounds of rejection.

All Claims Define Allowable Subject Matter

Claims 1-4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jung et al. (US 2004/0090566) in view of Arakawa et al. (US 6,621,550) and Gu et al. (US 6,359,672). Applicants respectfully traverse this rejection as being based upon prior art references that neither teach nor suggest the novel combination of features recited in amended independent claims 1 and 3, and hence dependent claims 2 and 4.

Independent claim 1, as amended, recites a liquid crystal display device including, in part, "a compensation film formed *to contact* the passivation film" and "a pixel electrode formed on at least the compensation film." Similarly, independent claim 3, as amended, recites a method of fabricating a liquid crystal display device including, in part, steps of "forming a compensation film *to contact* at least the passivation film" and "forming a pixel electrode on the compensation film."

The Final Office Action acknowledges that Jung et al. "lacks disclosure of a compensation film formed on the passivation film; and a pixel electrode formed on at least the compensation film." Accordingly, the Final Office Action relies upon Arakawa et al., as shown

in FIG. 7, for allegedly teaching a compensation film 110 formed on a passivation film 120 and pixel electrode 111 formed on at least the compensation film 11. In addition, the Final Office Action alleges that Arakawa et al. teaches this structure for “the benefit of having a clear moving image displayed, and a screen with a high contrast, [see col. 7, lines 58-59].” Thus, the Final Office Action concludes that it would have been obvious “to have a compensation film formed on the passivation film, and a pixel electrode formed on at least the compensation film for the benefit of having a clear moving image displayed, and a screen with a high contrast.” Applicants respectfully disagree.

First, Applicants respectfully assert that the compensation and passivation film and pixel electrode structure taught by Arakawa et al. are not the specific reason why clear moving images are displayed nor why a screen with a high contrast is obtained. Taken in full context, see col. 7, lines 10-59, Arakawa et al. discloses that the complete structure, as shown in FIG. 7, is the reason that clear moving images and high contrast is achieved. Accordingly, Applicants respectfully assert that Arakawa et al. fails to provide proper motivation for simply placing a compensation film between a pixel electrode and a passivation film, and thus, the Final Office Action fails to establish a *prima facie* case of obviousness with regard to at least independent claims 1 and 3.

Second, assuming *arguendo* that Arakawa et al. does provide adequate and proper motivation with which to modify Jung et al., Applicants respectfully assert that Arakawa et al. fails to teach or suggest anything with regard to “a compensation film formed *to contact* the passivation film” and “a pixel electrode formed on at least the compensation film,” as recited by amended independent claim 1. Similarly, Applicants respectfully assert that Arakawa et al. fails

to teach or suggest anything with regard to steps of “forming a compensation film *to contact* at least the passivation film” and “forming a pixel electrode on the compensation film,” as recited by amended independent claim 3.

Furthermore, Applicants respectfully assert that Gu et al. fails to remedy the deficiencies of Jung et al., as admitted by the Final Office Action, and of Arakawa et al., as detailed above. Specifically, Applicants respectfully assert that Gu et al. is completely silent with regard to forming a compensation film *to contact* at least a passivation film and forming a pixel electrode on the compensation film, as recited by amended independent claims 1 and 3.

Accordingly, Applicants respectfully assert that the Final Office Action fails to establish a *prima facie* case of obviousness with regard to amended independent claims 1 and 3, and hence dependent claims 2 and 4. Thus, Applicants respectfully request that the rejection of claims 1-4 under 35 U.S.C. § 103(a) as being unpatentable over Jung et al. in view of Arakawa et al. and Gu et al. be withdrawn.

Claims 5-11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Nakamura et al. (US 6,582,862) in view of Abileah et al. (US 5,499,126). Applicants respectfully traverse this rejection as being based upon prior art references that neither teach nor suggest the novel combination of features recited in amended independent claims 5 and 8, and hence dependent claims 6, 7, and 9-11.

Independent claim 5, as amended, recites a liquid crystal display device including, in part, “a *polarizing* compensation film formed on the overcoat film” and “a common electrode formed on the *polarizing* compensation film.”

The Final Office Action acknowledges that Nakamura et al. “lacks disclosure of a compensation film formed on the overcoat film; a common electrode formed on the compensation film.” Accordingly, the Final Office Action relies upon Abileah et al., presumably as shown in FIG. 19, for allegedly teaching use of a compensation film 67/68/70 formed on a color filter layer 42/44/46 and a common electrode 64 formed on the compensation film 67/68/70 for “the benefit of eliminating color leakages and maximizing the field of view of the display, [see col. 1, lines 8-9].” In addition, the Final Office Action alleges that “[since] above the color filter usually has an overcoat to protect the color filter layers, and to flatten the color filter layer as seen in fig. 1 of Nakamura et al reference, combining with secondary reference (Abileah), a compensation film would be formed on the overcoat film.” Thus, the Final Office Action concludes that it would have been obvious to “have a compensation film formed on the overcoat film, and a common electrode formed on the compensation film for the benefit of eliminating color leakages and maximizing the field of view of the display.” Applicants respectfully disagree.

First, Applicants respectfully assert that the disclosure of Abileah et al. “(col. 1, lines 8-9)” relied upon by the Final Office Action as providing proper motivation to modify Nakamura et al. is inadequate at best. Specifically, Applicants respectfully assert that the Final Office Action’s reliance upon the generalized disclosure at column 1, lines 8-9 of Abileah et al. to provide proper motivation to modify Nakamura et al. to arrive at Applicants’ claimed invention is both inadequate and improper to establish a *prima facie* case of obviousness with regard to Applicant’s claimed invention. Applicants respectfully assert that Abileah et al. fails to teach or suggest proper motivation to modify the structure disclosed by Nakamura et al. to include

Applicants' claimed structure of an overcoat film on a color filter layer, a compensation film on the overcoat film, and a common electrode on the compensation film. As an example, the description of FIG. 19 by Abileah et al., col. 28, lines 27, fails to provide any teaching, suggestion, or motivation to provide Applicants' claimed structure. Accordingly, Applicants respectfully assert that the combination of Nakamura et al. and Abileah et al. fails to establish a *prima facie* case of obviousness for Applicants' claimed invention of at least independent claim 5, and hence dependent claims 6-11.

Second, assuming *arguendo* that Abileah et al. provides proper and adequate motivation with which to modify Nakamura et al., Applicants respectfully assert that Abileah et al. is completely silent with regard to teaching or suggesting a liquid crystal display device including "a polarizing compensation film formed on the overcoat film" and "a common electrode formed on the polarizing compensation film," as recited by amended independent claim 5. Similarly, Applicants respectfully assert that Abileah et al. is completely silent with regard to teaching or suggesting a method of fabricating a liquid crystal display device including steps of "forming a polarizing compensation film on an upper surface of the color filter layer" and "forming a common electrode on the polarizing compensation film," as recited by amended independent claim 8.

Furthermore, Applicants respectfully assert that the reasoning set forth in the Final Office Action that "[since] above the color filter usually has an overcoat to protect the color filter layers, and to flatten the color filter layer as seen in fig. 1 of Nakamura et al reference, combining with secondary reference (Abileah), a compensation film would be formed on the overcoat film" is inadequate to establish a *prima facie* case of obviousness with regard to

Applicants' claimed invention. Specifically, Applicants respectfully assert that Nakamura et al. and Abileah et al., whether taken singly or combined, fail to teach or suggest formation of a compensation film on an overcoat film. Moreover, Applicants respectfully assert that without Applicants' explicit disclosure one of ordinary skill in the art would not be motivated to modify Nakamura et al. and/or Abileah et al. to incorporate a compensation film on an overcoat film. Furthermore, Applicants respectfully assert that one of ordinary skill in the art would not instinctively know how to incorporate the layered structure taught by Abileah et al. into the device structure of Nakamura et al. without the benefit of Applicants' explicit disclosure.

Accordingly, Applicants respectfully assert that the Final Office Action fails to establish a *prima facie* case of obviousness with regard to amended independent claims 5 and 8, and hence dependent claims 6, 7, and 9-11. Thus, Applicants respectfully request that the rejection of claims 5-11 under 35 U.S.C. §103(a) as being unpatentable over Nakamura et al. in view of Abileah et al. be withdrawn.

Claims 12-21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Abileah et al. in view of Nakamura et al. Applicants respectfully traverse this rejection as being based upon prior art references that neither teach nor suggest the novel combination of features recited in independent claims 12 and 17, and hence dependent claims 13-16 and 18-21.

Independent claim 12 recites a liquid crystal display device including, in part, "a compensation film at least disposed between one of the pixel electrode and the thin film transistor substrate to *contact* the pixel electrode, and the common electrode and the color filter substrate." Similarly, independent claims 17 recites a liquid crystal display device including, in

part, “wherein the overcoat film *directly contacts* the color filter film and the compensation film.”

In contrast to Applicants’ claimed invention, and not addressed by the Final Office Action, the alleged compensation film 67/68/70 in FIG. 19 of Abileah et al. fails to contact the pixel electrode 36. As required by independent claim 12, the compensation film is “at least disposed between one of the pixel electrode and the thin film transistor substrate to *contact* the pixel electrode.” Accordingly, the Final Office Action fails to establish a *prima facie* case of obviousness with regard to at least independent claim 12, since the Final Office Action fails to identify and/or acknowledge the deficiencies of Abileah et al., as detailed above.

Furthermore, Applicants respectfully assert that Nakamura et al. is completely silent with regard to a pixel electrode contacting a compensation film. Specifically, none of FIGs. 1 and 2 of Nakamura et al. teach or suggest a compensation film contacting a pixel electrode.

Accordingly, Nakamura et al. fails to remedy the deficiencies of Abileah et al. Thus, the combined teachings of Nakamura et al. and Abileah et al. fail to establish a *prima facie* case of obviousness with regard to at least independent claim 12, and hence dependent claims 13-16.

The Final Office Action acknowledges that Abileah et al. “lacks disclosure of an overcoat film on the color filter film; where the overcoat film directly contacts the color filter film and the compensation film.” Accordingly, the Final Office Action reasons that since Nakamura et al. teaches using a protection film 8 for protecting and flattening the color layer 7, then “combining Abileah et al reference [fig. 19] with Nakamura et al reference [fig. 1], the overcoat film would be directly contacted with the color filter film and the compensation film.” Thus, the Final Office Action concludes that it would have been obvious to “have an overcoat film, wherein the

overcoat film directly contacts the color filter film and the compensation film for the benefit of protecting the color layer and for flattening the color filter in the case a color layer is provided in the color filter.” Applicants respectfully disagree.

Applicants respectfully assert, with regard to independent claim 17, that an overcoat layer to protect the color filter layer and to flatten the color filter layer is completely unnecessary in Abileah et al. Specifically, the color filter structure 42/44/46 disclosed by Abileah et al. in FIG. 19 is overlaid with retardation film structure 67/68/70 having the same thicknesses. Accordingly, Applicants respectfully assert that one of ordinary skill in the art would not require formation of an overcoat film on the color filter structure 42/44/46 since the individual color filter layers 42, 44, and 46, as well as the retardation films 67, 68, and 70 are of equal thicknesses. Moreover, protection of the color filter structure 42/44/46 is already accomplished by the retardation film structure 67/68/70. Thus, Applicants respectfully assert that one of ordinary skill in the art would not unnecessarily incorporate an overcoat layer into the structure of Abileah et al. to accomplish protection and flattening of an already protected and flattened color filter structure.

Furthermore, Applicants respectfully assert that Nakamura et al. fails to teach or suggest substituting any of the layered structures of Abileah et al. with an overcoat layer. Specifically, Applicants respectfully assert that Nakamura et al. is completely silent with regard to compensation films in general. Thus, Nakamura et al. fails to remedy the deficiencies of Abileah et al., as detailed above.

Accordingly, Applicants respectfully assert that the Final Office Action fails to establish a *prima facie* case of obviousness with regard to amended independent claims 12 and 17, and hence dependent claims 13-16 and 18-21. Thus, Applicants respectfully request that the rejection of claims 12-21 under 35 U.S.C. §103(a) as being unpatentable over Abileah et al. in view of Nakamura et al. be withdrawn.

For at least the above reasons, Applicants respectfully assert that none of Jung et al., Arakawa et al., Gu et al., Nakamura et al., and Abileah et al., whether taken singly or in combination, teach or suggest the features of claims 1-21. Thus, Applicants respectfully request that the rejection of claims 1-21 under 35 U.S.C. § 103(a) be withdrawn.

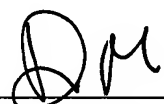
CONCLUSION

In view of the foregoing, Applicants respectfully request entry of the amendments, reconsideration and the timely allowance of all pending claims. Should the Examiner feel that there are any issues outstanding after consideration of this Response, the Examiner is invited to contact Applicants' undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such as an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

MORGAN, LEWIS & BOCKIUS LLP

By: 
David B. Hardy
Reg. No. 47,362

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CUSTOMER NO. 009629
MORGAN, LEWIS & BOCKIUS LLP
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
(202) 739-3000